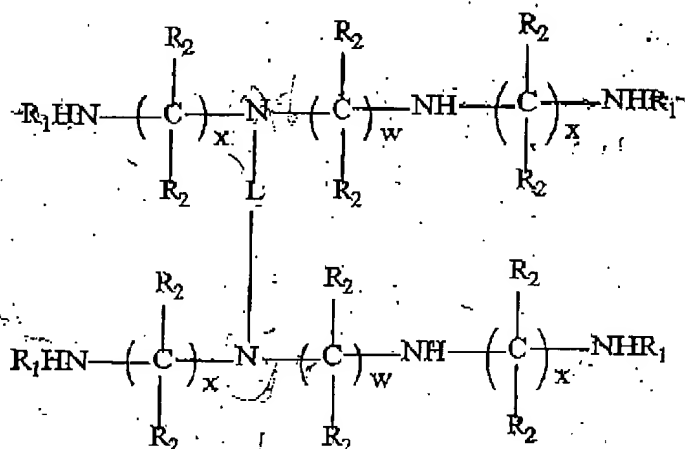


**IN THE CLAIMS**

Kindly cancel claim 44. Kindly amend claim 45 and 47 as follows. The remaining claims are unamended.

44. (cancelled)

45. (currently amended) A synthetic polyamine dimer formed of two polyamine units, each having at least three amino groups including an intermediate amino group, said units being attached to each other by alkylation through a linker which is a chemical entity that is covalently attached to both said intermediate amino groups said polyamine dimer having the following structure (2):



Wherein  $\text{R}_1$  is H, methyl, ethyl, n-propyl or isopropyl,  $\text{R}_2$  is H or methyl,  $x$  is greater than two and less than five ( $2 < x < 5$ ),  $w$  is greater than 2 and less than five ( $2 < w < 5$ ) and  $L$  is the linker as defined above.

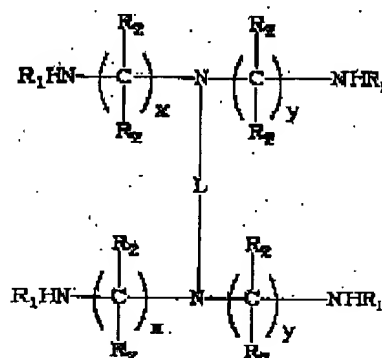
46. (previously added) The synthetic polyamine dimer as defined in claim 45, wherein  $x = 3$ ,  $\text{R}_1$  is a hydrogen atom  $\text{R}_2$  is a methyl ( $\text{CH}_3$ ) group for the carbon atom located next to each  $\text{NH}-\text{R}$  group and is a hydrogen atom for all those carbons and  $w = 4$ .

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47. (currently amended) A synthetic polyamine dimer formed of two polyamine units, each having at least three amino groups including an intermediate amino group, said units being attached to each other by alkylation through a linker which is a chemical entity that is covalently attached to both said intermediate amino groups said polyamine dimer having the following structure (3):



wherein  $R_1$  and  $R_2$  are as defined in claim 45, where  $x$  and  $y$  are greater than 2 and smaller than 5 ( $2 < x < 5$ ,  $2 < y < 5$ ), where the sum of  $x$  and  $y$  is greater than 5 and smaller than 9 ( $5 < (x + y) < 9$ ) and where  $L$  is the linker as defined above.

48. (previously added) The synthetic polyamine dimer as defined in claim 47, wherein the chemical linker comprises an alkyl, an aryl and/or a heterocyclic group.

49. (previously added) The synthetic polyamine dimer as defined in claim 47, wherein  $R_1$  is H,  $x$  is 3 or 4,  $y$  is 3 or 4.

50. (previously added) The synthetic polyamine dimer as defined in claim 47, wherein the linker  $L$  is an aliphatic carbon chain having a structure  $-(CH_2)_n-$ , where  $n$  is greater than 2 and less than 10.

51. (previously added) The synthetic polyamine dimer as defined in claim 47, when  $L$  is xylene.